associated with remission status at follow-up. Substance use in the year after psychosis onset was associated with increased probability of poor medication adherence during the follow-up. In particular, the analysis showed significant main effects of nicotine dependence (OR = 2.18), cannabis use (OR = 2.86), and stimulant use (OR = 2.63) on the odds of being non adherent to treatment. In contrast, the OR failed to reach significance for an association between problem drinking and poor medication adherence.
Substance use in the first year after psychosis onset was associated with increased probability of non-remission during the one year follow-up. In particular, the analysis showed significant main effects of nicotine dependence (OR = 2.13) and cannabis use (OR = 2.60) on probability of not achieving remission. In contrast, the ORs failed to reach significance for an association between problem drinking and non-remission as well as between stimulant use and non-remission. Medication adherence significantly predicted remission during the one year follow-up. In particular, patients with poor medication adherence showed a six-fold increased probability of non-remission of their psychosis when compared with patients with good medication adherence. When substance use in the one year follow-up period was added in to this model, the association between medication adherence and remission was still significant. Following Baron and Kenny's approach to mediation, criteria were satisfied only for nicotine dependence and cannabis use post onset. In order to test for mediation, the associations between nicotine dependence after psychosis onset and non-remission as well as between cannabis use and non-remission were adjusted for medication adherence. When medication adherence was added in to the model, even if increased, the ORs failed to reach significance. Sobel tests for mediation showed that medication adherence was a significant mediator of the relationship between nicotine dependence and remission ($z = 2.02$, $P = 0.04$) as well as that between cannabis use and remission ($z = 2.12$, $P = 0.03$).
Discussion: In conclusion, medication adherence lies on the causal pathway between nicotine dependence and cannabis on the one hand and non-remission on the other. As cannabis and tobacco are often consumed together in the same joint and there is accumulating evidence of a common underlying vulnerability to both substances, further research is needed to definitively disentangle their independent contribution on patients' clinical outcome.

M110. 36 Month results of a smoking and healthy lifestyles intervention among people with a psychotic disorder

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Background: People with schizophrenia have a life expectancy 15 years less than the general community, and much higher rates of chronic diseases such as cardiovascular disease, diabetes and obesity. In response to this disproportionately high burden of illness the first Australian National Report Card on Mental Health stated "the reduced life expectancies and poor health of people with the most severe mental illnesses…is a national disgrace and it should be a major public health concern". Telephone interventions for health behaviors (such as smoking, alcohol use, low fruit and vegetable consumption and high levels of sedentary activity) as well as for psychotic symptomatology and also smartphone applications have been evaluated with promising results. This is the first randomized controlled trial to evaluate a cognitive-behavioral intervention addressing smoking and other health behaviors among people with psychotic disorders.
Methods: Study participants were randomly assigned to receive a single face to face session consisting of feedback and motivational interviewing and nicotine replacement therapy, plus either: (i) a face-to-face intervention targeting multiple health risk behaviors; or (ii) a predominantly telephone delivered intervention involving monitoring. Follow-up surveys were completed at 15 weeks ($n = 165$, 70.2%), 12 months ($n = 139$, 59%), 18 months ($n = 132$, 56.2%), 24 months ($n = 133$, 56.6%), 30 months ($n = 129$, 54.9%) and 36 months ($n = 134$, 57%). ITT analysis was used for primary outcomes and mixed models were used for both primary and secondary modeling, so all study participants were included in analyses.
Results: At baseline, participants ($N = 235$, Age, M = 41.6 years, 59% male) were smoking on average 28.6 (SD = 15.3) CPD. There were no significant overall differences between the telephone and face-to-face conditions in the primary smoking outcome of biochemically confirmed point-prevalence abstinence rates (8% and 11% respectively) at 36 months. There were no significant differences between groups in most measures of exercise, diet and body measures (total minutes walking per week, total minutes sitting per week, BMI, waist circumference, weight, waist-to-hip ratio).
Discussion: Face-to-face and telephone-delivered interventions are feasible and effective among people with severe mental disorders for smoking. Interventions for multiple health behavior change appear worthy of further research among people with psychotic disorders.

M111. Impact of cannabis use on clinical outcomes and treatment failure in first episode psychosis

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Background: Cannabis is frequently used by people with first episode psychosis (FEP), though its effect on clinical outcome is less clear. We investigated whether cannabis use may be associated with increased risk of hospitalization and whether antipsychotic treatment failure, as indexed by number of unique antipsychotics prescribed, may mediate this effect in a large dataset of patients with FEP.
Methods: Data were obtained from electronic health records of 2,026 people with FEP in the South London and Maudsley NHS Foundation Trust (SLaM) using the Clinical Record Interactive Search tool (CRIS). Cannabis use was identified using natural language processing. Data on subsequent hospital admission and the number of unique antipsychotics prescribed (a marker of treatment failure) were obtained and analyzed using multivariable regression and mediation analyses with age, gender, ethnicity, marital status and diagnosis as covariates.
Results: Cannabis use was present in 46.3% of the sample at first presentation and was particularly common in patients who were 16-25, male and single. It was associated with increased frequency of hospital admission (incidence rate ratio 1.50, 95% CI 1.25 to 1.80), increased likelihood of compulsory admission (odds ratio 1.55, 1.16 to 2.08) and greater number of inpatient days (B coefficient 35.1 days, 12.1 to 58.1). Antipsychotic treatment failure mediated increased frequency of hospital admission (natural indirect effect: 1.09, 95% CI 1.01 to 1.18; total effect: 1.50, 1.21 to 1.87), increased likelihood of compulsory admission (NIE: 1.27, 1.03 to 1.58; TE: 1.76, 0.81 to 3.84) and greater number of inpatient days (NIE: 17.9, 2.4 to 33.4; TE: 34.8, 11.6 to 58.1).
Discussion: Cannabis use in patients with FEP was associated with increased likelihood and duration of hospital admission. This was linked to the prescription of several different antipsychotic drugs, indicating clinical judgement of antipsychotic treatment failure. This suggests that cannabis use might be associated with worse clinical outcomes in psychosis by contributing towards failure of antipsychotic treatment.

M112. Better social but worse academic premorbid adjustment in cannabis-users psychotic patients across Europe

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Background: Several studies report that patients with psychosis who used cannabis have a better cognitive performance than those who